



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,328	12/30/2005	Andreas Rochling	2400.0120000/VLC/CMB	6764

26111 7590 03/10/2009
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

HOLT, ANDRIAE M

ART UNIT	PAPER NUMBER
----------	--------------

1616

MAIL DATE	DELIVERY MODE
-----------	---------------

03/10/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/563,328	Applicant(s) ROCHLING ET AL.	
	Examiner Andriae M. Holt	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6,9 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the amendment filed December 15, 2008. Claims 1, 3-4, 6, and 9-10 are pending in the application. Claims 1, 4, and 6 have been amended.

Rejections not reiterated from the previous Office Action are hereby withdrawn. The following rejections are either reiterated or newly applied. They constitute the complete set of rejections presently being applied to the instant application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3-4, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutzmann et al. Publication (2002) in view of Warrington (WO 03/037084) and Dahms (US 5, 279, 766).

Applicant's Invention

Applicant claims an agrochemical formulation comprising Fluoxastrobin, gamma-butyrolactone, at least one ethylene diamine alkoxylate, which acts as an emulsion stabilizer and/or a crystallization inhibitor. Applicant further claims the formulation can further comprise prothioconazole. Applicant claims a method of contacting the formulation in the habitat of the plants to be treated and/or protected.

Determination of the scope of the content of the prior art (MPEP 2141.01)

Dutzmann et al. teach that HEC5725 (fluoxastrobin) is a leaf-systemic broad-spectrum fungicide from the chemical class of dihydro-dioxazines used mainly in cereal crops. Dutzmann et al. teach the compound provides both a rapid initial effect and prolonged activity due to its protective and leaf systemic properties. Dutzmann et al. teach HEC5725 provides excellent control of Septoria leaf spot, Septoria leaf and glume blotch, rust and Helminthosporium diseases in wheat and barley. Dutzmann et al. teach that mixtures of HEC5725 with selected fungicides such as prothioconazole often result in an increased biological activity against these diseases. Dutzmann et al. further teach fluoxastrobin has a favorable regulatory profile (Abstract, STN).

***Ascertainment of the difference between the prior art and the claims
(MPEP 2141.02)***

The Dutzmann Publication does not teach use of γ -butyrolactone and ethylene diamine alkoxylate in the formulation. It is for this reason Warrington and Dahms are added as secondary references.

Warrington teaches a concentrated pesticidal solution that is comprised of one or more water-insoluble pesticides and lignin dissolved in a water miscible, polar solvent (Abstract). Warrington teaches the pesticides include herbicides, insecticides and fungicides (page 2, line 12). Warrington teaches that particularly useful fungicides include triazole and strobilurin fungicides (page 2, lines 19-22). Warrington further teaches of particular interest are azoxystrobin, picoxystrobin, tebuconazole, cyproconazole and picoxystrobin in admixture with cyproconazole (page 2, lines 22-25). Warrington teaches the preferred solvents include γ -butyrolactone (page 3, lines 8-10) (claims 1 and 9, γ -butyrolactone, instant invention). Warrington teaches the solution concentration may include other additives such as polymer stabilizers or anti-settling agents to improve dilution (page 3, lines 14-15). Warrington further teaches examples of stabilizers include a xanthan gum (claim 1, emulsion stabilizer, instant invention). Warrington teaches the solution is prepared by dissolving the pesticide or pesticides, the lignin and a stabilizer or other additives in the polar solvent (page 4, lines 3-4) (claim 8, method of producing, instant invention). Warrington teaches the formulation provides a method of combating or controlling an agricultural pest which comprises applying to the pest or to the locus of the pest an effective amount of the dispersion (page 4, lines 13-16)(claim 10, method of protection, instant invention).

Dahms teaches compositions which have surfactant properties and to emulsions and dispersions which contain such compositions (col. 1, lines 9-11). Dahms teaches a useful composition in accordance with the present invention is the reaction product of (1) an ethylene diamine alkoxylate (ethylene diamine alkoxylate, instant invention) having a molecular weight of at least 10000 and containing oxyethylene and oxypropylene groups where the oxyethylene groups are at least 60% by weight of the oxyalkylene groups; (2) pentaerythritol or glycerol; (3) phthalic acid and/or phthalic anhydride; and (4) linoleic acid (optional ingredients, instant invention) (col. 6, lines 31-40). Dahms further teaches the compositions of the present invention may be used for the production of emulsions. If the emulsion is an oil-in-water emulsion, the oil phase in such an emulsion may be a resin such as an alkyd resin, a polyester resin or an epoxide resin. We have found that in many cases the minimum emulsifier concentration can be reduced and the emulsions obtained have an acceptable shelf life when using the compositions invention (col. 7, lines 53-61). Dahms teaches the compositions of the present invention may also be used to emulsify or disperse agrochemicals such as herbicides, insecticides or growth-regulating materials (col. 8, lines 58-60).

Finding a prima facie obviousness
Rationale and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art to combine the teachings of the Dutzmann Publication, Warrington, and Dahms and use γ -butyrolactone as the solvent and ethylene diamine alkoxylate in the formulation. Dutzmann et al. teach fluoxastrobin provides both rapid initial effect and prolonged

Art Unit: 1616

activity due to its protective and leaf systemic properties. Dutzmann et al. also teach that mixtures of HEC5725 (fluoxastrobin) with selected fungicides such as prothioconazole often result in an increased biological activity against these diseases. One skilled in the art at the time the invention was made would have been motivated to use γ -butyrolactone as the preferred solvent because Warrington teaches that the compositions comprising a strobilurin fungicide with γ -butyrolactone, stabilizers and other additives provide storage stable soluble strobilurin compositions. In addition, as evidenced by the Lianyou Publication γ -butyrolactone is one of the major chemical materials which has extensive application in pesticides.

One skilled in the art at the time the invention was made would have been motivated to use ethylene diamine alkoxyate as the surfactant because Dahms teaches surfactant compositions containing ethylene diamine alkoxyate are used to emulsify or disperse agrochemicals. Therefore, the skilled artisan would have been motivated with a reasonable expectation of success in using ethylene diamine alkoxyate in the formulation to produce emulsions with acceptable shelf lives.

Each of the references is silent as to the use of Synperonic T/304 as the specific ethylene diamine alkoxyate in the formulation. One skilled in the art would have been motivated to use Synperonic T/304 as a matter of routine experimentation and optimization. The adjustment of particular conventional working conditions (e.g., particular brands of surfactants) is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan. Accordingly,

Art Unit: 1616

this type of modification would have been well within the purview of the skilled artisan and no more than an effort to optimize results.

Therefore, the claimed invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made because every element of the invention has been fairly suggested by the cited reference.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dutzmann et al. Publication (2002) in view of Warrington (WO 03/037084) and Dahms (US 5, 279, 766) in further view of Cotter et al. (US 6,277,856).

Applicant's Invention

Applicant claims an agrochemical formulation comprising Fluoxastrobin, gamma-butyrolactone, ethylene diamine alkoxylate as an emulsion stabilizer and/or a crystallization inhibitor. Applicant further claims the formulation further comprises Trifloxystrobin.

Determination of the scope of the content of the prior art (MPEP 2141.01)

The teachings of Dutzmann et al., Warrington, and Dahms are incorporated herein by reference and are therefore applied in the instant rejection as discussed above.

Ascertainment of the difference between the prior art and the claims (MPEP 2141.02)

Dutzmann et al., Warrington, and Dahms do not teach the addition of trifloxystrobin to the formulation. It is for this reason Cotter et al. is joined as a secondary reference.

Cotter et al. teach a fungicidal composition comprising an acceptable carrier and/or surface active agent and synergistically effective amounts of at least one compound of formula (I) and at least one fungicidal active ingredient selected from compounds (A), (B) a fungicidal triazole derivative and (C) a synthetic strobilurin derivative (col. 2, lines 19-33). Cotter et al. teach solvents used in the composition may be γ -butyrolactone (col. 5, lines 56-63). Cotter et al. teach in examples 27-31, columns 20-22, the fungicidal efficacy of the mixture of (s)-azolopyrimidine C in admixture with trifloxystrobin (claim 6, trifloxystrobin, instant invention).

Finding a prima facie obviousness
Rationale and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art to combine the teachings of Dutzmann et al., Warrington, Dahms and Cotter et al. and use fluoxastrobin combined with trifloxystrobin in the formulation. Dutzmann et al. teach fluoxastrobin provides both rapid initial effect and prolonged activity due to its protective and leaf systemic properties. Dutzmann et al. also teach that mixtures of HEC5725 (fluoxastrobin) with selected fungicides such as prothioconazole often result in an increased biological activity against these diseases. Warrington teaches that the compositions comprising a strobilurin fungicide with γ -butyrolactone, stabilizers and other additives provide storage stable soluble strobilurin compositions. Cotter et al.

Art Unit: 1616

teach the fungicidal efficacy of the mixture of (s)-Azolopyrimidine C in admixture with Trifloxystrobin. In view of *In re Kerkhoven*, 205 USPQ 1069 (C.C.P.A. 1980), it is *prima facie* obvious to combine two or more compositions each of which is taught by prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose. The idea of combining them flows logically from their having been individually taught in prior art, thus claims that requires no more than mixing together two or three conventional fungicides set forth *prima facie* obvious subject matter.

Therefore, one skilled in the art at the time the invention was made would have been motivated to use fluoxastrobin combined with trifloxystrobin as Cotter et al. teach that mixtures of trifloxystrobin with other fungicidal compositions provide synergistic control of the growth of phytopathogenic fungi. Given the state of the art as evidenced by the teachings of the cited references, and absent any evidence to the contrary, there would have been a reasonable expectation of success in combining the teachings of the cited references to form a safe, storage stable strobilurin composition that provides increased biological activity against a varied number of diseases.

Therefore, the claimed invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made because every element of the invention has been fairly suggested by the cited reference.

Response to Arguments

Applicant's arguments filed December 15, 2008 have been fully considered but they are not persuasive. Applicant argues that Warrington requires the presence of lignin in the pesticidal solution, which is not present in the claimed invention. In response to applicant's arguments, applicant uses open terminology, the term comprising, which opens the formulation to the addition of other ingredients. In addition, the claim comprises optionally other additives. Therefore, one skilled in the art would have been motivated to have lignin in the formulation as other additives can be added to the composition.

Applicant also argues that Cotter teaches that the synergistic formulations require at least one azolopyrimidine. In response to applicant's arguments, applicant uses open terminology, the term comprising, which opens the formulation to the addition of other ingredients. Therefore, one skilled in the art would have been motivated to use an azolopyrimidine compound in the formulation as other ingredients can be added to the composition.

Therefore, the claims remain rejected.

None of the claims are allowed.

Conclusion

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andriae M. Holt whose telephone number is 571-272-9328. The examiner can normally be reached on 9:00 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Andriae M. Holt
Patent Examiner
Art Unit 1616

/John Pak/
Primary Examiner, Art Unit 1616